



**Comisión Interministerial de Ciencia y
Tecnología**

Curriculum vitae

Name: Pablo Serrano Yáñez-Mingot

Date: January 15, 2020

Family name: Serrano Yáñez-Mingot

First name: Pablo

Present Position

Entity: Univ. Carlos III of Madrid
Faculty: Escuela Politécnica Superior
Department: Telematic Engineering Department
Address: C/Avda. de la Universidad 30, 28911 Leganés (Madrid), Spain

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E-mail: pablo@it.uc3m.es

Specialization (UNESCO codes): 3325

Position: Profesor Titular de Universidad

Start date: 01/04/2011

Administrative situation

Plantilla

Contratado

Interino

Grant

Other situations specify:

Dedication

Full time

Partial time

Research interests

Wireless Networks. Performance evaluation. Testbed deployment. 5G Networks.

Degrees

| Bachelor/Master | Entity | Date |
|----------------------------|---------------------------------|-----------|
| Telecommunication Engineer | University Carlos III of Madrid | July 2002 |
| | | |

| PhD | Entity | Date |
|--------------------------|---------------------------------|---------------|
| Communication Technology | University Carlos III of Madrid | December 2006 |
| | | |

Previous activities

| <u>Position</u> | <u>Institution</u> | <u>Dates</u> |
|------------------|----------------------------------|-------------------------|
| PDI | Universidad Carlos III de Madrid | 01/10/2002 - 26/11/2003 |
| Ayudante | Universidad Carlos III de Madrid | 27/10/2003 - 15/04/2008 |
| Titular Interino | Universidad Carlos III de Madrid | 16/04/2008 - 31/03/2011 |

Languages (R = poor, W = average, C = fluent)

| <u>Language</u> | <u>Talk</u> | <u>Read</u> | <u>Write</u> |
|-----------------|-------------|-------------|--------------|
| English | C | C | C |
| Spanish | C | C | C |
| French | W | W | R |

Participation in R+D projects funded by public calls (Nationals and/or Internationals)

Internationals

Project title: Hexa-X: A flagship for 6G vision and intelligent fabric of technology enablers connecting human, physical, and digital worlds

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: NOKIA SOLUTIONS AND NETWORKS OY, ERICSSON AB, AALTO KORKEAKOULUSAATIO SR, ATOS SPAIN SA, B-COM, CHALMERS TEKNISKA HOEGSKOLA AB, COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, ERICSSON ARASTIRMA GELISTIRME VE BILISIM HIZMETLERI ANONIM SIRKETI, ERICSSON MAGYARORSZAG KOMMUNIKACIOS RENDSZEREK KFT, MAGYAR TUDOMANYOS AKADEMIA SZAMITASTECHNIKAI

ES AUTOMATIZALASI KUTATOINTEZET, INTEL DEUTSCHLAND GMBH, NEXTWORKS, NOKIA SOLUTIONS AND NETWORKS GMBH & CO KG, ORANGE SA, POLITECNICO DI TORINO, Qamcom Research and Technology AB, SIEMENS AKTIENGESELLSCHAFT, TECHNISCHE UNIVERSITAET DRESDEN, TECHNISCHE UNIVERSITAET KAISERSLAUTERN, TELECOM ITALIA SPA, TELEFONICA INVESTIGACION Y DESARROLLO SA, UNIVERSIDAD CARLOS III DE MADRID, OULUN YLIOPISTO, UNIVERSITA DI PISA, WINGS ICT SOLUTIONS

Duration, from: 01/2021 to: 06/2022

Funding: 362,812.5 € (Total: 11,916,175 €)

Main researcher: **Pablo Serrano**

Project title: 5G EVE: 5G European Validation platform for Extensive trials

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: TELECOM ITALIA SPA, ORANGE SA, ORANGE ROMANIA SA, ORANGE POLSKA SPOLKA AKCYJNA, TELEFONICA INVESTIGACION Y DESARROLLO SA, HELLENIC TELECOMMUNICATIONS ORGANIZATION S.A., ERICSSON ESPANA SA, ERICSSON HELLAS, ERICSSON TELECOMUNICAZIONI, NOKIA BELL LABS FRANCE, NOKIA SPAIN SA, NOKIA SOLUTIONS AND NETWORKS HELLAS SA, WINGS ICT SOLUTIONS INFORMATION & COMMUNICATION TECHNOLOGIES EPE, B-COM, NEXTWORKS, COMUNE DI TORINO, AUTOMATISMOS Y SISTEMAS DE TRANSPORTE INTERNO S.A., TRENITALIA SPA, APPLIED RESEARCH TO TECHNOLOGIES S.R.L., TELCARIA IDEAS SL, IDC ITALIA SRL, EURESCOM - EUROPEAN INSTITUTE FOR RESEARCH EUR AND STRATEGIC STUDIES IN TELECOMMUNICATIONS GMBH, PROMOZIONE PER L'INNOVAZIONE FRA INDUSTRIA PIU E UNIVERSITÀ ASSOCIAZIONE, EURECOM, UNIVERSIDAD CARLOS III DE MADRID, CONSORZIO NAZIONALE INTERUNIVERSITARIO PER CNIT LE TELECOMUNICAZIONI, SOCIEDAD ESTATAL PARA LA GESTIÓN DE LA INNOVACIÓN Y LAS TECNOLOGÍAS TURÍSTICAS, ELECTRICITE DE FRANCE

Duration, from: 07/2018 to: 06/2021

Funding: 796.225,00 € (Total: 15.737.785,00 €)

Main researcher: **Pablo Serrano**

Project title: 5G-VINNI (5G Verticals INNOvation Infrastructure)

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: TELNOR ASA, BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY, TELEFONICA INVESTIGACION Y DESARROLLO SA. SAMSUNG ELECTRONICS (UK)

LIMITED, HUAWEI TECHNOLOGIES DUESSELDORF GMBH, Huawei Technologies Norway AS, Ericsson AS, NOKIA SOLUTIONS AND NETWORKS OY, SOFTWARE RADIO SYSTEMS LIMITED, Lime Microsystems, EANTC AG, KEYSIGHT TECHNOLOGIES DENMARK APS, SIMULA RESEARCH LABORATORY AS, FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., EURESCOM- EUROPEAN INSTITUTE FOR RESEARCH AND STRATEGIC STUDIES IN TELECOMMUNICATIONS GMBH, ALTICE LABS SA, PANEPISTIMIO PATRON, UNIVERSIDAD CARLOS III DE MADRID, ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS - RESEARCH CENTER, INTRACOM SA TELECOM SOLUTIONS, SES TECHCOM SA, Cisco Norway AS, ENGINEERING - INGEGNERIA INFORMATICA SPA

Duration, from: 07/2018 to: 06/2021

Funding: 599.750,00 € (Total: 19.997.733,50 €)

Main researcher: Carmen Guerrero

Project title: 5G-MoNArch (5G Mobile Network Architecture for diverse services, use cases, and applications in 5G and beyond)

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: Nokia Solutions and Networks Management International GmbH (Munich, Germany), Universidad Carlos III de Madrid (Madrid, Spain), Deutsche Telekom AG (Germany), Nokia Bell Labs France (Nozay, France), Huawei Technologies Duesseldorf GmbH (Germany), Telecom Italia (Torino, Italy), Samsung Electronics Limited (Chertsey, United Kingdom), ATOS SE (Madrid, Spain), Hamburg Port Authority (Hamburg, Germany), CEA LETI (Grenoble, France), Centre for Research & Technology Hellas (Thessaloniki, Greece), Mobics Ltd (Athens, Greece), Real Wireless (London, United Kingdom), Nomor Research (Munich, Germany), University of Kaiserslautern (Kaiserslautern, Germany)

Duration, from: 07/2017 to: 06/2019

Funding: (total: 7.681.088,75 €)

Main researcher: Albert Banchs

Project title: Flex5Gware (Flexible and efficient hardware/software platforms for 5G network elements and devices)

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: Alcatel-Lucent, Ericsson, NEC, Intel Deutschland GmbH, Telecom Italia, CEA, CNIT, CTTC, Fraunhofer-IAF, iMinds, KU Leuven, UC3M, UNI Pisa, VTT, TST-Sistemas, Sequans, Wings ICT-Solutions

Duration, from: 07/2015 to: 06/2017

Funding: 598.687,5 (total: 7.993.588 €)

Main researcher: **Pablo Serrano**

Project title: 5GNORMA: 5G Novel Radio Multiservice adaptive network Architecture

Funded by: European Commission under the HORIZON 2020 Framework Programme.

Participating entities: Nokia Networks, Alcatel-Lucent, Azcorn Technology, ATOS, Telefónica, UC3M, King's College London, NEC, Real Wireless.

Duration, from: 07/2015 to: 12/2017

Funding:

Main researcher: Albert Banchs

Project title: CROWD: Connectivity management for eneRgy Optimised Wireless Dense network

Funded by: VII Framework Program ICT

Participating entities: INSTITUTE IMDEA NETWORKS, ALCATEL LUCENT BELL LABS FRANCE, SIGNALION, UNIVERSITY OF PADERBORN, INTECS, ORANGE LABS FRANCE, UNIVERSIDAD CARLOS III DE MADRID

Duration, from: 01/2013 to: 12/2015

Funding:

Main researcher: Antonio de la Oliva

Project title: TREND: Towards Real Energy-Efficient Network Design

Funded by: VII Framework Program ICT

Participating entities: HUAWEI TECHNOLOGIES DUESSELDORF GMBH, INTERDISCIPLINARY INSTITUTE FOR BROADBAND TECHNOLOGY, TELEFONICA INVESTIGACION Y DESARROLLO SA, FASTWEB SPA, CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI, PANEPISTIMIO THESSALIAS (UNIVERSITY OF THESSALY), ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE, TECHNISCHE UNIVERSITAT BERLIN, ALCATEL - LUCENT BELL LABS FRANCE, FRANCE TELECOM SA, UNIVERSIDAD CARLOS III DE MADRID

Duration, from: 09/2010 to: 08/2013

Funding:

Main researcher: Carmen Guerrero López

Project title: FLAVIA: Flexible Architecture for Virtuable wireless future Internet Access

Funded by: VII Framework Program ICT

Participating entities: CONSORZIO INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI (Coordinator), ALVARION Ltd, NEC EUROPE Ltd., TELEFONICA INVESTIGACION & DESAROLLO, MOBIMESH BEN GURION UNIVERSITY OF THE NEGEV, INSTITUTE FOR INFORMATION TRANSMISSION PROBLEMS OF THE RUSSIAN ACADEMY OF SCIENCE, FUNDACION IMDEA NETWORKS, HAMILTON INSTITUTE OF THE NATIONAL UNIVERSITY OF IRELAND MAYNOOTH, SEQUANS COMMUNICATION SA., AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY

Duration, from: 07/2010 to: 06/2013

Funding: 200.000 €

Main researcher: Albert Banchs Roca

Project title: CARMEN: CARrier grade MESH Networks (INFISO-ICT-214994)

Funded by: VII Framework Program ICT

Participating entities: Universidad Carlos III de Madrid, British Telecom Plc., Deutsche Telekom AG, NEC Europe Ltd., Alcatel-Lucent Deutschland AG, Fraunhofer Institute for Open Communication Systems (FOKUS), University College Dublin, National University of Ireland, AGH University of Science and Technology Cracow

Duration, from: 01/2008 to: 12/2010

Funding: 1.200.000 €

Main researcher: Arturo Azcorra Saloña

Project title: DAIDALOS II: Designing Advanced Interfaces for the Delivery and Administration of Location independent Optimised personal Services (IST-2005-026943)

Funded by: VI Framework Program IST

Participating entities: Deutsche Telekom AG, Portugal Telecom Inovacao SA, Telenor Communications II AS, Telefonica Investigation y Dessarrollo Sociedad Anonima Unipersonal, Eurescom, Telecom Italia. S.p.A., Polska Telefonica Cyfrowa, Telediffusion de France, OTE Hellenic Telecommunicaitons Organization S.A., Motorola S.A.S, Siemens AG, NEC Europe Ltd., Lucent Technologies Nederland BV,

BMW Forschung und Technik GMBH, SES Global, Fraunhofer Gesellschaft zur Förderung der angewandten Forschung, Deutsches Zentrum für Luft-und Raumfahrt e.V., Institut Eurecom, Institute for Infocomm Research, Instituto de Telecomunicacoes, Universität Stuttgart, Universidad Carlos III de Madrid, Zavod Za Varnostne Tehnologije Informacijske Druzbe in Elektronsko, Akademia Gorniczo-Hutnicza, Heriot-Watt University, ICCS- Institute of Communication and Computer Systems of the Nation Technical University of Athens, Agora Systems S.A., HW Communications Limited, comnac – Communications Network Aachen GMBH, France Telecom, Eidgenössische Technische Hochschule Zúrci, Waterford Institute of Technology, Lake Holdings, Institute of Communication and Information Technologies Ltd., UH Communications A/S, TTL LAB (China Academy of Telecommunication Research of MII), INESC Porto - Instituto de Engenharia de Sistemas e Coputadores do Porto, Universidade do Porto / Laboratory of Artificial Intelligence, Computer Science, Universität Ulm, Technische Universität Braunschweig, Universidad de Murcia, Jozef Stefan Institute, University Lancaster, Temagon - Technology & Management Consultancy Services S.A., Consorzio Centro di Ricerca in Matematica Pura ed Applicata c/o – Università di Roma "La Sapienza", The University of Auckland, Fachhochschule Bonn-Rhein-Sieg

Duration, from: 01/2006 to: 12/2008

Funding: 209.500 €

Main researcher: Arturo Azcorra Saloña

Project title: CONTENT: NoE Content Networks and Services for Home Users (IST-03824)

Funded by: VI Framework Program IST

Participating entities: Universidad Carlos III de Madrid (coordinador), Universitat Politècnica de Catalunya – CCABA, Lancaster University, Université Pierre et Marie Curie, Universidade de Coimbra, National and Kapodistrian University of Athens, Technische Universität Darmstadt, AGH University of Science and Technology, Universitet i Oslo, Delft University of Technology, Consorzio Interuniversitario Nazionale per l'Informatica - University of Napoli

Duration, from: 01/2005 to: 12/2009

Funding: 2.5 Meuro (total) €

Main researcher: Arturo Azcorra Saloña

Project title: DAIDALOS: Designing Advanced Interfaces for the Delivery and Administration of Location independent Optimised personal Services (IST-2002-506997)

Funded by: VI Framework Program IST

Participating entities: Deutsche Telekom AG, Portugal Telecom Inovacao SA, Telenor Communications II AS, Telefonica Investigation y Dessarrollo Sociedad Anonima Unipersonal, Eurescom, Telecom Italia. S.p.A., Polska Telefonica Cyfrowa, Telediffusion de France, OTE Hellenic Telecommunicaitons Organization S.A., Motorola S.A.S, Siemens AG, NEC Europe Ltd., Lucent Technologies Nederland BV, BMW Forschung und Technik GMBH, SES Global, Fraunhofer Gesellschaft zur Förderung der angewandten Forschung, Deutsches Zentrum für Luft-und Raumfahrt e.V., Institut Eurecom, Institute for Infocomm Research, Instituto de Telecomunicacoes, Universität Stuttgart, Universidad Carlos III de Madrid, Zavod Za Varnostne Tehnologije Informacijske Druzbe in Elektronsko, Akademia Gorniczo-Hutnicza, Heriot-Watt University, ICCS- Institute of Communication and Computer Systems of the Nation Technical University of Athens, Agora Systems S.A., HW Communications Limited, comnac – Communications Network Aachen GMBH, France Telecom, Eidgenössische Technische Hochschule Zúrci, Waterford Institute of Technology, Lake Holdings, Institute of Communication and Information Technologies Ltd., UH Communications A/S, TTL LAB (China Academy of Telecommunication Research of MII), INESC Porto - Instituto de Engenharia de Sistemas e Coputadores do Porto, Universidade do Porto / Laboratory of Artificial Intelligence, Computer Science, Universität Ulm,

Technische Universität Braunschweig, Universidad de Murcia, Jozef Stefan Institute, University Lancaster, Temagon - Technology & Management Consultancy Services S.A., Consorzio Centro di Ricerca in Matematica Pura ed Applicata c/o – Università di Roma "La Sapienza", The University of Auckland, Fachhochschule Bonn-Rhein-Sieg

Duration, from: 11/2003 to: 04/2006

Funding: 413.847,66 €

Main researcher: Arturo Azcorra Saloña

Project title: MOBY DICK: Mobility and Differentiated Services in a Future IP Network (IST-2000-25394)

Funded by: V Framework Program IST

Participating entities: Deutsche Telekom, NEC Europe Ltd., University Carlos III of Madrid, Swiss Federal Institute of Technology Zurich (TIK), University of Stuttgart (RUS, IND), FhG Fokus (GLONE, SatCom), Portugal Telecom Inovacao, Centre de Recherche de Motorola, EURECOM, AGH University of Science and Technology (UKR, AGH), Forschungszentrum Telekommunikation Wien, Institute for Communications Research

Duration, from: 01/2001 to: 12/2003

Funding: 364.977 €

Main researcher: Arturo Azcorra Saloña

Project title: E-NEXT Emerging Networking Experiments and Technologies. Red de Excelencia (IST 2004-506869)

Funded by: VI Framework Program IST

Participating entities: Universidad Carlos III de Madrid (Coordinator), Universitat Politècnica de Catalunya, Telefónica Investigación y Desarrollo Sociedad Anónima Unipersonal, Universidad Politécnica de Madrid, University of Lancaster (Computing Department), The Chancellor Masters and Scholars of the University of Cambridge, University College London, University Pierre & Marie Curie – CNRS, CNRS, Institut National de Recherche en Informatique et Automatique, Institut EURECOM, Université de Liège, Université Catholique de Louvain, Universidade de Coimbra, Portugal Telecom Inovacao, ADETTI - Associação para o Desenvolvimento das Telecomunicações e Técnicas de Informática, Technische Universiteit Delft, University of Twente, National and Kapodistrian University of Athens (Department of Informatics and Telecommunications), University of Patras, KTH - Kungliga Tekniska Högskolan, SICS, Swedish Institute of Computer Science AB, CINI - Consorzio Interuniversitario Nazionale per l'Informatica, Politecnico di Torino, Dipartimento di Ingegneria dell'Informazione, Università di Pisa, Università degli Studi di Trento, Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V., Multimedia Communications Lab, Technical University of Darmstadt, Universität Mannheim, Technische Universität Braunschweig, Helsinki University of Technology / Networking Laboratory, Tampere University of Technology, Technical University of Denmark, Forschungszentrum Telekommunikation Wien Betriebs-GmbH

National University of Ireland - Cork (University College Cork), ETHZ - Eidgenössische Technische Hochschule Zürich, AGH University of Science and Technology, University of Oslo, Budapest University of Technology and Economics, University of Cyprus, Reykjavík University, Intel Research Cambridge, Ericsson Hungary Communication Systems Ltd., Thales Communications S.A.

Duration, from: 01/2004 to: 06/2006

Funding: 106.800 €

Main researcher: Arturo Azcorra Saloña

Nationals

Project title: Gestión Adaptativa de Servicios 5G para dar Soporte a Eventos Críticos en Ciudades Cities (5GCity)

Funded by: Ministerio de Economía, Industria y Competitividad

Participating entities: UC3M

Duration, from: 12/2016 to: 12/2019 Funding: €

Main researcher: Arturo Azcorra/Francisco Valera

Project title: TIGRE5-CM: TECNOLOGÍAS INTEGRADAS DE GESTIÓN Y OPERACIÓN DE RED 5G

Funded by: Comunidad de Madrid

Participating entities: Fundación IMDEA Networks, Universidad de Alcalá de Henares, UC3M

Duration, from: 11/2014 to: 10/2018 Funding: 569.250,00 €

Main researcher: **Pablo Serrano**

Project title: DRONEXT: Rapid deployment of a multiservice communications infrastructure for protection, security and defense

Funded by: Ministerio de Ciencia y Competitividad

Participating entities: UC3M

Duration, from: 01/2015 to: 12/2016 Funding:

Main researcher: Francisco Valera Pintor

Project title: eeCONTENT: EFICIENCIA ENERGETICA EN DISTRIBUCION DE CONTENIDO

Funded by: Ministerio de Ciencia y Competitividad

Participating entities: UC3M

Duration, from: 01/2012 to: 12/2014 Funding:

Main researcher: Rubén Cuevas Rumín

Project title: MEDIANET: Integración de Servicios Multimedia de Siguiete Generación en la Internet del Futuro

Funded by: Comunidad de Madrid

Participating entities: Fundación IMDEA Networks, Universidad de Alcalá de Henares, Alcatel-Lucent Spain, Univ. Complutense de Madrid, UC3M

Duration, from: 1/2010 to: 12/2013 Funding: €

Main researcher: Jaime José García Reinoso

Project title: Eficiencia energética en redes de comunicaciones

Funded by: Comunidad de Madrid

Participating entities: UC3M

Duration, from: 01/2011 to: 31/2011 Funding:

Main researcher: José Alberto Hernández Gutiérrez

Project title: POSEIDON: Provisión Óptima de SErvicios a reDes vehiculares en mOvimieNto (TSI2006-12507-C03)

Funded by: Plan Nacional de I+D, Ministerio de Educación y Ciencia

Participating entities: UC3M

Duration, from: 01/2007 to: 12/2009 Funding: 148.200 €

Main researcher: María Calderón Pastor

Número de investigadores participantes:

Project title: BIOGRIDNET: Evolución de las Aplicaciones Bioinformáticas sobre Servicios de Red y Computación Distribuida Grid (S-0505/TIC-0101)

Funded by: Comunidad de Madrid

Participating entities: UC3M

Duration, from: 01/2006 to: 12/2009

Funding: 471.022 €

Main researcher: Arturo Azcorra Saloña

Project title: CONVERGENCIA FIJO-MÓVIL EN REDES (UC3M-TEC-05-044)

Funded by: Comunidad de Madrid – UC3M

Participating entities: UC3M

Duration, from: 01/2006 to: 12/2006

Funding: 8.000 €

Main researcher: María Calderón Pastor

Publications

(KEY: B = complete book, BC = book chapter, A = article, R = "review", E = editor)

Journals (JCR)

Authors: Gines Garcia-Aviles, Carlos Donato, Marco Gramaglia, **Pablo Serrano**, Albert Banchs

Title: ACHO: A Framework for Flexible Re-Orchestration of Virtual Network Functions

Key journal: Computer Networks

Key: A Vol.: 180 No: Pages, first: last: Date: October 2020

JCR impact factor:

DOI: <https://doi.org/10.1016/j.comnet.2020.107382>

Authors: Gines Garcia-Aviles, Marco Gramaglia, **Pablo Serrano**, Francesco Gringoli, Sergio Fuente-Pascual, Ignacio Labrador Pavon

Title: Experimenting with open source tools to deploy a multi-service and multi-slice mobile network

Key journal: Computer Communications

Key: A Vol.: 150 No: 15 Pages, first: last: Date: January 2020

JCR impact factor:

DOI: <https://doi.org/10.1016/j.comcom.2019.11.003>

Authors: Vincenzo Sciancalepore, Christian Mannweiler, Faqir Zarrar Youssaf, **Pablo Serrano**, Marco Gramaglia, Julie Bradford, Ignacio Labrador Pavón

Title: A Future-proof Architecture for Management and Orchestration of Multi-domain NextGen Networks

Key journal: IEEE Access

Key: A Vol.: 7 No: 1 Pages, first: last: Date: December 2019

JCR impact factor:

DOI: <http://doi.org/10.1109/ACCESS.2019.2923364>

Authors: Francesco Gringoli, **Pablo Serrano**, Iñaki Ucar, Nicolò Facchi, Arturo Azcorra

Title: Experimental QoE Evaluation of Multicast Video Delivery over IEEE 802.11aa WLANs

Key journal: IEEE Transactions on Mobile Computing

Key: A Vol.: 18 No: 11 Pages, first: last: Date: November 2019

JCR impact factor:

DOI: <http://doi.org/10.1109/TMC.2018.2876000>

Authors: Ginés García-Avilés, Marco Gramaglia, **Pablo Serrano**, Albert Banchs

Title: POSENS: a Practical Open-source Solution for End-to-end Network Slicing

Key journal: IEEE Wireless Communications Magazine

Key: A Vol.: 25 No 5 Pages, first: last: Date: October 2018

JCR impact factor:

DOI: <https://doi.org/10.1109/MWC.2018.1800050>

Authors: Francesco Gringoli, Paul Patras, Carlos Donato, **Pablo Serrano**, Yan Grunenberger

Title: Performance Assessment of Open Software Platforms for 5G Prototyping

Key journal: IEEE Wireless Communications Magazine
Key: A Vol.: 25 No 5 Pages, first: last: Date: October 2018
JCR impact factor:
DOI: <https://doi.org/10.1109/MWC.2018.1800049>

Authors: Nikolaos Bartzoudis, Marco Miozzo, Carlos Donato, Pavel Harbanau, Manuel Requena-Esteso, David Lopez-Bueno, **Pablo Serrano**, Josep Mangues-Bafalluy, Miquel Payaro
Title: Design, implementation and experimental validation of a 5G energy-aware reconfigurable hotspot
Key journal: Elsevier Computer Communications
Key: A Vol.: No Pages, first: last: Date: Sep. 2018
JCR impact factor:
DOI: <https://doi.org/10.1016/j.comcom.2018.06.008>

Authors: **Pablo Serrano**, Marco Gramaglia, Dario Bega, David Gutiérrez-Estévez, Ginés García-Avilés, Albert Banchs
Title: The path towards a cloud-aware mobile network protocol stack
Key journal: Transactions on Emerging Telecommunications Technologies
Key: A Vol.: No Pages, first: last: Date: April 2018
JCR impact factor:
DOI: <https://doi.org/10.1002/ett.3312>

Authors: Iñaki Úcar, José A. Hernández, **Pablo Serrano**, Arturo Azcorra
Title: Design and Analysis of 5G Scenarios with simmer: An R Package for Fast DES Prototyping
Key journal: IEEE Communications Magazine
Key: A Vol.: No Pages, first: last: Date: Nov. 2018
JCR impact factor:
DOI: <https://doi.org/10.1109/MCOM.2018.1700960>

Authors: Luca Cominardi, Carlos J. Bernardos, **Pablo Serrano**, Albert Banchs, Antonio de la Oliva
Title: Experimental evaluation of SDN-based service provisioning in mobile networks
Key journal: Elsevier Computer Standards and Interfaces
Key: A Vol.: No Pages, first: last: Date: May 2018
JCR impact factor:
DOI: <https://doi.org/10.1016/j.csi.2018.01.004>

Authors: Cristina Cano, Doug Leith, Andrés Garcia-Saavedra, **Pablo Serrano**
Title: Fair Coexistence of Scheduled and Random Access Wireless Networks: Unlicensed LTE/WiFi
Key journal: IEEE/ACM Transactions on Networking
Key: A Vol.:26 No: 6 Pages, first: last: Date: Dec. 2017
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/TNET.2017.2731377>

Authors: Iñaki Úcar, Carlos Donato, **Pablo Serrano**, Andrés Garcia-Saavedra, Arturo Azcorra, Albert Banchs
Title: On the Energy Efficiency of Rate and Transmission Power Control in 802.11
Key journal: Elsevier Computer Communications
Key: A Vol.: No Pages, first: last: Date: July 2017
JCR impact factor:

DOI: <https://doi.org/10.1016/j.comcom.2017.07.002>

Authors: Arturo Azcorra, Iñaki Úcar, Francesco Gringoli, Albert Banchs, **Pablo Serrano**

Title: uNap: Practical Micro-Sleeps for 802.11 WLANs

Key journal: Elsevier Computer Communications

Key: A Vol.: 110 No Pages, first: last: Date: Sept. 2017

JCR impact factor:

DOI: <https://doi.org/10.1016/j.comcom.2017.06.008>

Authors: Jorge Ortín, Carlos Donato, **Pablo Serrano**, Albert Banchs

Title: Resource-on-Demand Schemes in 802.11 WLANs with Non-Zero Start-Up Times

Key journal: IEEE Journal on Selected Areas in Communications

Key: A Vol.: No Pages, first: last: Date: Dec. 2016

JCR impact factor:

<http://dx.doi.org/10.1109/JSAC.2016.2624158>

Authors: Miquel Payaró, Michael Färber, Panagiotis Vlachas, Nikolaos Bartzoudis, Fredrik Tillman, Dieter Ferling, Vincent Berg, Tapio Rautio, **Pablo Serrano**, Dario Sabella

Title: Flex5Gware: Flexible and efficient hardware and software platforms for 5G network elements and devices

Key journal: Wiley Trans. Emerging Tel. Tech

Key: A Vol.: No Pages, first: last: Date: Sept. 2016

JCR impact factor:

DOI: <http://dx.doi.org/10.1002/ett.3070>

Authors: Jorge Ortín, **Pablo Serrano**, Carlos Donato

Title: Optimal configuration of a resource-on-demand 802.11 WLAN with non-zero start-up times

Key journal: Elsevier Computer Communications

Key: A Vol.: No Pages, first: last: Date: Dec. 2016

JCR impact factor:

DOI: <http://dx.doi.org/10.1016/j.comcom.2016.04.022>

Authors: Albert Banchs, Jorge Ortín, Andrés García-Saavedra, Doug Leith, **Pablo Serrano**

Title: Thwarting Selfish Behavior in 802.11 WLANs

Key journal: IEEE/ACM Transactions on Networking

Key: A Vol.: No Pages, first: last: Date: Feb. 2016

JCR impact factor:

DOI: <http://dx.doi.org/10.1109/TNET.2014.2369535>

Authors: Carlos Donato, **Pablo Serrano**, Antonio de la Oliva, Albert Banchs, Carlos J. Bernardos

Title: An OpenFlow Architecture for Energy Aware Traffic Engineering in Mobile Networks

Key journal: IEEE Network

Key: A Vol.: 29, No4 Pages, first: 54 last: 60 Date: July/Aug. 2015

JCR impact factor:

DOI: <http://dx.doi.org/10.1109/MNET.2015.7166191>

Authors: **Pablo Serrano**, Pablo Salvador, Vincenzo Mancuso, Yan Grunenberger

Title: Experimenting with Commodity 802.11 Hardware: Overview and Future Directions

Key journal: IEEE Communications Surveys and Tutorials
Key: A Vol.: 17, No 2 Pages, first:671 last: 669 Date: 2nd Q 2015
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/COMST.2015.2417493>

Authors: Andres Garcia-Saavedra, Albert Banchs, **Pablo Serrano**, Joerg Widmer
Title: Adaptive Mechanism for Distributed Opportunistic Scheduling
Key journal: IEEE Transactions on Wireless Communications
Key: A Vol.:14, No 6 Pages, first: 3494 last: 3508 Date: June 2015
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/TWC.2015.2407367>

Authors: Andres Garcia-Saavedra, Balaji Rengarajan, **Pablo Serrano**, Daniel Camps-Mur, Xavier Costa-Perez
Title: SOLOR: Self-Optimizing WLANs with Legacy-Compatible Opportunistic Relays
Key journal: IEEE/ACM Transactions on Networking
Key: A Vol.:23., No 4 Pages, first: 1202 last: 1215 Date: Aug. 2015
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/TNET.2014.2321975>

Authors: **Pablo Serrano**, Andres Garcia-Saavedra, Giuseppe Bianchi, Albert Banchs, Arturo Azcorra
Title: Per-frame Energy Consumption in 802.11 Devices and its Implication on Modeling and Design
Key journal: IEEE/ACM Transactions on Networking
Key: A Vol.:23., No 4 Pages, first: 1243 last: 1256 Date: Aug. 2015
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/TNET.2014.2322262>

Authors: Carlos J. Bernardos, Antonio de la Oliva, **Pablo Serrano**, Albert Banchs, Luis M. Contreras, Hao Jin, Juan Carlos Zúñiga
Title: An Architecture for Software Defined Wireless Networking
Key journal: IEEE Wireless Communications
Key: A Vol.: 21, No: 6 Pages, first: 52 last: 61 Date: June 2014
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/MWC.2014.6845049>

Authors: Andres Garcia-Saavedra, **Pablo Serrano**, Albert Banchs
Title: Energy-efficient Optimization for Distributed Opportunistic Scheduling
Key journal: IEEE Communications Letters
Key: A Vol.: 18, No: 6 Pages, first: last: Date: June 2014
JCR impact factor:
DOI: <http://dx.doi.org/10.1109/LCOMM.2014.2315210>

Authors: Albert Banchs, Antonio de la Oliva, Lucas Eznarriaga, Dariusz R. Kowalski, **Pablo Serrano**
Title: Performance Analysis and Algorithm Selection for Reliable Multicast in IEEE 802.11aa Wireless LAN
Key journal: IEEE Transactions on Vehicular Technology
Key: A Vol.:, No Pages, first: last: Date: February 2014
JCR impact factor:

DOI: <http://dx.doi.org/10.1109/TVT.2014.2306014>

Authors: Pablo Salvador, Vincenzo Mancuso, **Pablo Serrano**, Francesco Gringoli, Albert Banchs
Title: VolPiggy: Analysis and Implementation of a Mechanism to Boost Capacity in IEEE 802.11 WLANs Carrying VoIP Traffic

Key journal: IEEE Transactions on Mobile Computing

Key: A Vol.: No Pages, first: last: Date: August 2013

JCR impact factor:

DOI: <http://dx.doi.org/10.1109/TMC.2013.114>

Authors: Albert Banchs, Andrés Garcia-Savedra, **Pablo Serrano**, Joerg Widmer

Title: A Game Theoretic Approach to Distributed Opportunistic Scheduling

Key journal: IEEE/ACM Transactions on Networking

Key: A Vol.:21 No 5 Pages, first: 1153 last: 1566 Date: October 2013

JCR impact factor:

DOI: <http://dx.doi.org/10.1109/TNET.2012.2228500>

Authors: Daniel Camps-Mur, Andres Garcia-Saavedra, **Pablo Serrano**

Title: Device to device communications with WiFi Direct: overview and experimentation

Key journal: IEEE Wireless Communications Magazine

Key: A Vol.: 20 No: 3 Pages, first: 96 last: 109 Date: June 2013

JCR impact factor:

DOI: <http://dx.doi.org/10.1109/MWC.2013.6549288>

Authors: **Pablo Serrano**, Paul Patras, Andrea Mannocci, Vincenzo Mancuso, Albert Banchs

Title: Control Theoretic Optimization of 802.11 WLANs: Implementation and Experimental Evaluation

Key journal: Elsevier Computer Networks

Key: A Vol.:57, No 1 Pages, first: last: Date: January 2013

JCR impact factor:

DOI: <http://dx.doi.org/10.1016/j.comnet.2012.09.010>

Authors: **Pablo Serrano**, Antonio de la Oliva, Paul Patras, Vincenzo Mancuso, Albert Banchs

Title: Greening Wireless Communications: Status and Future Directions

Key journal: Elsevier Computer Communications

Key: A Vol.:35, No 14 Pages, first: last: Date: 2012

JCR impact factor:

Authors: Albert Banchs, **Pablo Serrano**, Paul Patras, Marek Natkaniec

Title: Providing Throughput and Farness Guarantees in Virtualized WLANs through Control Theory

Key journal: Springer Mobile Networks and Applications

Key: A Vol.:17, No 4 Pages, first: last: Date: August 2012

JCR impact factor:

Authors: Antonio de la Oliva, Albert Banchs, **Pablo Serrano**

Title: Throughput and energy-aware routing for 802.11 based Mesh Networks

Key journal: Elsevier Computer Communications

Key: A Vol.: Pages, first: last: Date: July 2012

JCR impact factor:

Authors: A. Garcia-Saavedra, **Pablo Serrano**, A. Banchs, M. Hollick
Title: Balancing Energy Efficiency and Throughput Fairness in IEEE 802.11 WLANs
Key journal: Elsevier Pervasive and Mobile Computing Book
Key: A Vol.: Volume , Issue Pages, first: last: Date: October 2012
Publisher (if Book):
Place:

Authors: Antonio de la Oliva, Albert Banchs, **Pablo Serrano**, Frank Zdarsky
Title: Providing Throughput Guarantees in Heterogeneous Wireless Mesh Networks
Key journal: Wiley Wireless Communications and Mobile Computing
Key: A Vol.: Pages, first: last: Date:
JCR impact factor:

Authors: Paul Patras, Albert Banchs, **Pablo Serrano**
Title: A Control Theoretic Scheme for Efficient Video Transmission over IEEE 802.11e EDCA WLANs
Key journal: ACM Transactions on Multimedia Computing, Communications and Applications
Key: A Vol.: Pages, first: last: Date: July 2012
JCR impact factor:

Authors: P. Patras, A. Banchs, **Pablo Serrano**, A. Azcorra
Title: A Control Theoretic Approach to Distributed Optimal Configuration of 802.11 WLANs
Key journal: IEEE Transactions on Mobile Computing
Key: A Vol.:12 Pages, first: last: Date: June 2011
JCR impact factor:

Authors: **Pablo Serrano**, M. Hollick, A. Banchs
Title: On the Trade-Off between Throughput Maximization and Energy Consumption Minimization in IEEE 802.11 WLANs
Key journal: Journal of Communications and Networks 0 Book:
Key: A Vol.:12 Pages, first: last: Date: April 2010
JCR impact factor:

Authors: **Pablo Serrano**, A. Banchs, P. Patras, A. Azcorra
Title: Optimal Configuration of 802.11e EDCA for Real-Time and Data Traffic
Key journal: IEEE Transactions on Vehicular Technology 0 Book:
Key: A Vol.: 59 Pages, first: last: Date: June 2010
JCR impact factor (2007):

Authors: A. Banchs, **Pablo Serrano**, L. Voller
Title: Providing Service Guarantees in 802.11e EDCA WLANs with Legacy Stations
Key journal: IEEE Transactions on Mobile Computing 0 Book:
Key: A Vol.:9 Pages, first: last: Date: August 2010
JCR impact factor (2007):

Authors: **Pablo Serrano**, A. Banchs, V. Targon, J. F. Kukielka
Title: Detecting Selfish Configurations in 802.11 WLANs
Key journal: IEEE Communications Letters Book:

Key: A Vol.:14 Pages, first: last: Date: February 2010
JCR impact factor (2007):

Authors: **Pablo Serrano**, Carlos J. Bernardos, A. de la Oliva, A. Banchs, I. Soto, M. Zink
Title: FloorNet: Deployment and Evaluation of Multihop Wireless 802.11 Testbed
Key journal: EURASIP Journal on Wireless Communications and Networking 0 Book:
Key: A Vol.: 2010 Pages, first: last: Date:
JCR impact factor (2007):

Authors: P. Patras, A. Banchs, **Pablo Serrano**
Title: A Control Theoretic Approach for Throughput Optimization in IEEE 802.11e EDCA WLANs
Key journal: Springer Mobile Networks and Applications Book:
Key: A Vol.: Pages, first: last: Date: December 2009
JCR impact factor (2007): 0.58

Authors: A. Banchs, **Pablo Serrano**
Title: Revisiting 802.11e EDCA performance analysis
Key journal : Springer Wireless Personal Communications Book
Key: A Vol.: vol. 43, no. 4 Pages, first: 1145 last: 1149 Date: Dec 2007
JCR impact factor (2007): 0.23

Authors: A. Banchs, **Pablo Serrano**, L. Volleró
Title: Reducing the Impact of Legacy Stations on Voice Traffic in 802.11e EDCA WLANs
Key journal : IEEE Communication Letters Book
Key: A Vol.: 11 Pages, first: 331 last: 334 Date: Apr. 2007
JCR impact factor (2007): 0.869

Authors: **Pablo Serrano**, A. Banchs, A. Azcorra
Title: A Throughput and Delay Model for IEEE 802.11e EDCA Under Non Saturation
Key journal : Springer Wireless Personal Communications Book
Key: A Vol.: Vol. 43, no. 2 Pages, first: 467 last: 479 Date: Oct 2007
JCR impact factor (2007): 0.23

Authors: . Melia, A. de la Oliva, I. Soto, **Pablo Serrano**, R. Aguiar
Title: Network Controlled Handovers: Challenges and Possibilities
Key journal : Springer Wireless Personal Communications Book
Key: A Vol.: Vol. 43, no. 3 Pages, first: 959 last: 974 Date: Noviembre 2007
JCR impact factor (2007): 0.23

Authors: A. Banchs, **Pablo Serrano**, H. Oliver
Title: Proportional Fair Throughput Allocation in Multirate 802.11e EDCA Wireless LANs
Key journal : Springer Wireless Networks Book
Key: A Vol.: vol. 13, no. 5 Pages, first: 649 last: 662 Date: Oct 2007.
JCR impact factor (2007): 0.741

Authors: A. Banchs, **Pablo Serrano**, A. Azcorra
Title: End-to-end Delay Analysis and Admission Control in 802.11 DCF WLANs
Key journal : Elsevier Computer Communications Book

Key: A Vol.: vol. 29, issue 7 Pages, first: 842 last: 854 Date: Apr 2006
JCR impact factor (2006): 0.444

Authors: A. Cuevas, **Pablo Serrano**, J. I. Moreno, C. J. Bernardos, J. Jähnert, R. L. Aguiar and V. Marques

Title: Usability and Evaluation of a Deployed 4G Network Prototype

Key : journal: Journal of Communications and Networks Book:

Key:A Vol.: Volume 7, Number 2 Pages, first:222 last: 230 Date: June 2005

JCR impact factor (2005): 0.457

Book chapters

Authors: Chia-Yu Chang, Dario Sabella, David Garcia-Roger, Dieter Ferling, Fredrik Tillman, Gian Michele Dell'Aera, Leonardo Gomes Baltar, Michael Farber, Miquel Payaro, David Nikaein, **Pablo Serrano**, Raymond Knopp, Sandra Roger, Sylvie Maryrargue and Tapio Rautio
Title: Implementation of Hardware and Software Platforms
Key journal : Book: 5G System Design: Architectural and Functional Considerations and Long Term Research
Key: CL Vol.: Pages, first: last: Date: May 2018
Publisher (if Book): John Wiley and Sons
Place:

Authors: J. Lessmann, P. Loureiro, J. Fitzpatrick, **Pablo Serrano** and A. Banchs
Title: Towards Carrier-Grade Quality in Heterogeneous Wireless Mesh Networks
Key journal : Book: Wireless Multi-Access Environments and Quality of Service Provisioning: Solutions and Application ISBN: 1466600179: 9781466600188
Key: CL Vol.: Pages, first: 187 last: 216 Date: 2010
Publisher (if Book): IGI Global
Place:

Authors: A. Banchs, **Pablo Serrano**
Title: Analysis and Configuration of IEEE 802.11e
Key journal : Book: Medium Access Control in Wireless Networks (Wireless Networks & Mobile Computing Series) ISBN: 1600219446 : 9781600219443
Key: CL Vol.: Pages, first: 407 last: 422 Date: July 2008
Publisher (if Book): Nova Publishers Inc.
Place: New York

Authors: A. Banchs, **Pablo Serrano**
Title Applications and Configuration of 802.11e Wireless LANs
Key journal : Book: Progress in Wireless Communications Research
Key: CL Vol.: Pages, first: 121 last: 149 Date: Feb 2007
Publisher (if Book): Nova Publishers Inc.
Place: New York

Journals (non JCR)

Authors: Pablo Salvador, Luca Cominardi, Francesco Gringoli, **Pablo Serrano**

Title: A First Implementation and Evaluation of the IEEE 802.11aa Group Addressed Transmission Service

Key journal: ACM Computer Communication Review Book

Key: A Vol.: Volume: 44, Issue: 1 Pages, first: last: Date: January 2014

Publisher (if Book):

Place:

Authors: Marc Portoles-Comeras, Albert Cabellos-Aparicio, **Pablo Serrano**, Josep Mangués-Bafalluy, Jose Nunez-Martinez, Marc Sole, Albert Banchs, Jordi Domingo-Pascual

Title: Modeling and exploiting the relation between packet losses and hidden traffic

Key journal: IEEE Wireless Communications Letters Book

Key: A Vol.: Volume 2, Issue 4 Pages, first: 391 last: 394 Date: August 2013

Publisher (if Book):

Place:

Authors: C. García, A. Cuevas, J.I. Moreno, I. Soto, C.J. Bernardos, **Pablo Serrano**

Title: Soporte de QoS en Redes de 4a. Generación

Key journal: IEEE Latin America Transactions: Book

Key: A Vol.: Volume 4, Issue 1 Pages, first: 14 last: 20 Date: March 2006

Publisher (if Book):

Place:

Participation in R&D contracts - PI
(Nationals and/or Internationals)

Project/Contract title: 5G Networks Group R&D Collaboration with UC3M
Contract type: ART. 83 DE LA LOU
Funded by: NEC Europe LTD
Participating entities: Universidad Carlos III de Madrid
Main researcher: **Pablo Serrano**
Date: from 06/2018 until 05/2019

Project/Contract title: Enhancing GPS Ghoster
Contract type: ART. 83 DE LA LOU
Funded by: ORANGE SA
Participating entities: Universidad Carlos III de Madrid
Main researcher: **Pablo Serrano**
Date: from 05/2019 until 11/2019

Project/Contract title: Transport Digital Demand Models
Contract type: ART. 83 DE LA LOU
Funded by: Real Wireless Limited
Participating entities: Universidad Carlos III de Madrid
Main researcher: **Pablo Serrano**
Date: from 07/2018 until 06/2019

Project/Contract title: Design and Evaluation of Adaptive Schemes for MPTCP in overlay, LISP-based technologies
Contract type: ART. 83 DE LA LOU
Funded by: SILICON VALLEY COMMUNITY FOUNDATION
Participating entities: Universidad Carlos III de Madrid
Main researcher: **Pablo Serrano**
Date: from 11/2015 until 11/2016

Project/Contract title: Web content popularity evolution mining
Contract type: ART. 83 DE LA LOU
Funded by: NEC Europe LTD.
Participating entities: NEC Europe LTD, Universidad Carlos III de Madrid
Main researcher: **Pablo Serrano**
Date: from 4/2014 until 9/2014

Project/Contract title: Apoyo a las tareas de investigación y desarrollo de un nuevo concepto de teléfono móvil, denominado "teléfono elástico"
Contract type: ART. 83 DE LA LOU

Funded by: Telefónica I+D

Participating entities: Telefónica I+D, Universidad Carlos III de Madrid

Main researcher: **Pablo Serrano**

Date: 9/2013 until 3/2014

Patents

Authors: Arturo Azcorra Saloña, Iñaki Úcar Marqués, Albert Banchs Roca, Pablo Serrano Yáñez-Mingot (UC3M), Francesco Gringoli (UNIBS)

Title: Método de ahorro de energía basado en microapagados para un dispositivo inalámbrico en una red de telecomunicación

Number: PCT/ES2017/070520 Country: Spain

Date: 22/08/2017

Main entity: UC3M

Other countries:

Exploitation enterprise:

**Research stays in foreign countries
(above one month)**

KEY: D = PhD, P = postdoc, G = guest, C = contracted, O = Other (specify).

Place: University of Rome Tor Vergata – supervised by Prof. Giuseppe Bianchi
City: Rome Country: Italy Date: October 2020 Duration (weeks): 8
Research line: Performance evaluation of mobile communications services using UAVs
Key: P, G,

Place: University of Edinburgh – supervised by Prof. Paul Patras
City: Edinburgh Country: UK Date: July 2017 Duration (weeks): 12
Research line: Performance assessment of software platforms for 5G
Key: P, G,

Place: Università di Brescia – supervised by Prof. Francesco Gringoli
City: Brescia Country: Italy Date: May 2016 Duration (weeks): 6
Research line: Performance evaluation of 802.11aa
Key: P, G,

Place: University Massachusetts, Amherst (UMass) – supervised by Prof. Jim Kurose
City: Amherst Country: U.S.A. Date: August 2007 Duration (weeks): 27
Research line: Performance evaluation of wireless sniffers
Key: P, G

Conferences

Authors: Sébastien Henri, Ginés García-Avilés, **Pablo Serrano**, Albert Banchs, Patrick Thiran
Title: Protecting against Website Fingerprinting with Multihoming
Participation: Paper
Conference: 20th Privacy Enhancing Technologies Symposium (PETS 2020),
Place: Montréal, Canada, Date: July 14-18 2020

Authors: Marco Gramaglia, Ignacio Labrador, Francesco Gringoli, Ginés García-Avilés, **Pablo Serrano**
Title: Design and Validation of a Multi-service 5G Network with QoE-aware Orchestration
Participation: Paper
Conference: ACM WiNTECH '18
Place: New Delhi, USA Date: November 2nd, 2018

Authors: Gines Garcia-Aviles, Marco Gramaglia, **Pablo Serrano**, Marc Portoles-Comeras, Albert Banchs, Fabio Maino
Title: SEMPER: A Stateless Traffic Engineering Solution for WAN based on MP-TCP
Participation: Paper
Conference: IEEE ICC 2018, Next Generation Networking and Internet Symposium
Place: Kansas City, USA Date: May 20-24th, 2018

Authors: Iñaki Ucar, Carlos Donato, **Pablo Serrano**, Andrés García-Saavedra, Arturo Azcorra, Albert Banchs
Title: Revisiting 802.11 Rate Adaptation from Energy Consumption's Perspective
Participation: Paper
Conference: ACM MSWiN 2016,
Place: Malta, Date: November 13-17th, 2016

Authors: Ismael Gomez-Miguel, Andrés Garcia-Saavedra, Paul D. Sutton, **Pablo Serrano**, Cristina Cano, Doug J. Leith
Title: srsLTE: An Open-Source Platform for LTE Evolution and Experimentation (Best paper award)
Participation: Paper
Conference: ACM WiNTECH 2016
Place: New York, USA Date: October 2016

Authors: Jorge Ortín, **Pablo Serrano**, Carlos Donato
Title: Modeling the Impact of Start-Up Times on the Performance of Resource-on-Demand Schemes in 802.11 WLANs
Participation: Paper
Conference: Sustain IT - The 4th IFIP Conference on Sustainable Internet and ICT for Sustainability,
Place: Madrid, ES Date: April 2015

Authors: Pablo Salvador, Francesco Gringoli, **Pablo Serrano**, Nicolò Facchi, Stefano Paris
Title: Making a Case for Flexible 802.11 Architectures
Participation: Paper
Conference: IEEE International Conference on Communications (ICC) - Mobile and Wireless Networking Symposium,

Place: London, UK Date: June 2015

Authors: M. Isabel Sanchez, Carlos J. Bernardos, Antonio de la Oliva, **Pablo Serrano**

Title: Energy Consumption Savings with 3G Offload

Participation: Paper

Conference: 78th IEEE Vehicular Technology Conference (VTC Fall)

Place: Las Vegas, NV, EEUU Date: September 2013

Authors: Antonio de la Oliva, **Pablo Serrano**, Pablo Salvador, Albert Banchs

Title: Performance Evaluation of the IEEE 802.11aa Multicast Mechanisms for Video Streaming

Participation: Paper

Conference: 14th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)

Place: Madrid (Spain) Date: June 2013

Authors: Andres Garcia-Saavedra, Albert Banchs, **Pablo Serrano**, Joerg Widmer

Title: Energy consumption anatomy of 802.11 devices and its implication on modeling and design

Participation: Paper

Conference: ACM CoNEXT '12

Place: Nice (France) Date: December 2012

Authors: Andres Garcia-Saavedra, Albert Banchs, **Pablo Serrano**, Joerg Widmer

Title: Distributed Opportunistic Scheduling: A Control Theoretic Approach

Participation: Paper

Conference: IEEE Conference on Computer Communications (IEEE INFOCOM 2012) -

Place: Orlando (USA) Date: March 2012

Authors: Pablo Salvador, Francesco Gringoli, Vincenzo Mancuso, **Pablo Serrano**, Andrea Mannocci, Albert Banchs

Title: VoIPiggy: Implementation and evaluation of a mechanism to boost voice capacity in 802.11 WLANs

Participation: Paper

Conference: IEEE Conference on Computer Communications (IEEE INFOCOM 2012) - MiniConference

Place: Orlando (USA) Date: March 2012

Authors: A. Garcia-Saavedra, **Pablo Serrano**, A. Banchs, M. Hollick

Title: Energy-efficient fair channel access for IEEE 802.11 WLANs

Participation: Paper

Conference: 12th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)

Place: Lucca (Italy) Date: June 2011

Authors: M. Gramaglia, **Pablo Serrano**, J. A. Hernández, M. Calderón, C. J. Bernardos

Title: New Insights from the Analysis of Free Flow Vehicular Traffic in Highways

Participation: Paper

Conference: 12th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)

Place: Lucca (Italy) Date: June 2011

Authors: Antonio de la Oliva, Lucas Eznarriaga, Carlos J. Bernardos, **Pablo Serrano**, Albert Vidal
Title: IEEE 802.21: A Shift in the Media Independence
Participation: Paper
Conference: ICT-MobileSummit 2011
Place: Warsaw (Poland) Date: June 15-17, 2011

Authors: **Pablo Serrano**, A. Garcia-Saavedra, M. Hollick, A. Banchs
Title: On the Energy Efficiency of IEEE 802.11 WLANs
Participation: Paper
Conference: European Wireless 2010 - Invited Session – Greening of the Wireless Internet
Place: Lucca (Italy) Date: April 2010

Authors: **Pablo Serrano**, C. J. Bernardos, A. de la Oliva, I. Soto
Title: Lessons Learned from the Deployment of a Multihop IEEE 802.11g Testbed Using COTS Devices
Participation: Paper
Conference: European Wireless 2010 - Invited Session - Wireless Mesh Networks
Place: Lucca (Italy) Date: April 2010

Authors: A. Banchs, **Pablo Serrano**, M. Hollick, L. Vollerero
Title: Throughput and Energy Efficiency in IEEE 802.11 WLANs: Friends or Foes?
Participation: Invited Paper
Conference: ICST QShine 2009
Place: Canary Island (Spain) Date: November 2009

Authors: **Pablo Serrano**, A. de la Oliva, C. J. Bernardos, I. Soto, A. Banchs, A. Azcorra
Title: A CARMEN Mesh Experience: Deployment and Results
Participation: Invited Paper
Conference: 1st IEEE WoWMoM Workshop on Hot Topics in Mesh Networkings
Place: Kos Island (Greece) Date: 15 June 2009

Authors: **Pablo Serrano**, P. Patras, X. Pérez-Costa, B. Gloss, D. Chieng
Title: A MAC Layer Abstraction for Heterogeneous Carrier Grade Mesh Networks
Participation: Paper
Conference: ICT-MobileSummit 2009
Place: Santander (Spain) Date: 19-25 June 2009

Authors: **Pablo Serrano**, M. Zink, J. Kurose
Title: Assessing the fidelity of COTS 802.11 sniffers
Participation: Paper
Conference: IEEE Conference on Computer Communications (IEEE INFOCOM 2009)
Place: Rio de Janeiro (Brazil) Date: 19-25 April 2009

Authors: **Pablo Serrano**, A. Banchs, J.F.Kukielka, G. D'Agostino, Murphy
Title: Configuration of IEEE 802.11e EDCA for Voice and Data traffic: An Experimental Study
Participation: Paper
Conference: ICT-MobileSummit 2008

Place: Sweden Date: 10-12 June 2008

Authors: **Pablo Serrano**, A. Banchs, J. F. Kukielka
Title: Optimal Configuration of 802.11e EDCA under Voice Traffic
Participation: Paper
Conference: IEEE Global Communications Conference (IEEE GLOBECOM 2007)
Place: Washington D.C. (USA) Date: 26-30 Nov 2007

Authors: **Pablo Serrano**, A. Banchs
Title: Configuración óptima de redes WLAN 802.11e EDCA cursando datos y tráfico VoIP
Participation: Paper (AT4 WIRELESS best paper award)
Conference: VI Jornadas de Ingeniería Telemática, JITEL 2007
Place: Málaga Date: 17-19 Sept 2007

Authors: M. Urueña, D. Larrabeiti, **Pablo Serrano**
Title: Fast Robust Hashing
Participation: Paper
Conference: IEEE Global Communications Conference (IEEE GLOBECOM 2006)
Place: San Francisco (USA) Date: 27 Nov – 1 Dec 2006

Authors: A. Banchs, G. Iannello, **Pablo Serrano**, L. Vollero
Title: A CAPWAP Architecture for Dynamic Configuration of QoS MAC Parameters
Participation: Invited paper
Conference: 1st Workshop on multiMedia Applications over Wireless Networks (MediaWiN 2006)
Place: Greece Date: 2 April 2006

Authors: T. Melia, M. Liebsh, **Pablo Serrano**, A. Banchs
Title: The Daidalos Architecture for Mobility and QoS
Participation: Paper
Conference: World Telecommunications Congress 2006
Place: Hungary Date: 30 April – 3 May 2006

Authors: **Pablo Serrano**, A. Banchs, T. Melia, L. Vollero
Title: Performance Anomalies of Nonoptimally Configured Wireless LANs
Participation: Paper
Conference: IEEE Wireless Communications & Networking Conference (IEEE WCNC 2006)
Place: Las Vegas (USA) Date: 3-6 Apr 2006

Authors: **Pablo Serrano**, A. Banchs, J. F. Kukielka
Title: Detection of Malicious Parameter Configurations in 802.11e EDCA
Participation: Paper
Conference: IEEE Global Communications Conference (IEEE GLOBECOM 2005)
Place: St. Louis (USA) Date: 28 Nov-2 Dec 2005

Authors: **Pablo Serrano**, D. Larrabeiti, M. Urueña, A. G. Marques
Title: Error-Aware Scheduling and its Effects on Efficiency and Fairness
Participation: Paper
Conference: 11th Open European Summer School EUNICE 2005

Place: Colmenarejo, Madrid Date: 6-8 July 2005

Authors: **Pablo Serrano**, D. Larrabeiti, A. León

Title: Tunable Least Served First

Participation: Paper

Conference: 11th Open European Summer School EUNICE 2005

Place: Colmenarejo, Madrid Date: 6-8 July 2005

Authors: G. Carneiro, C. Garcia, P. Neves, Z. Chen, M. Wetterwald, M. Ricardo, **Pablo Serrano**, S. Sargento and A. Banchs

Title: The DAIDALOS Architecture for QoS over Heterogeneous Wireless Networks

Participation: Paper

Conference: IST Mobile & Wireless Communications Summit

Place: Dresden, Germany Date: June 2005

Authors: M. Urueña, D. Larrabeiti, **Pablo Serrano**

Title: A Scalable Service Discovery Framework with Load Sharing Capabilities

Participation: Paper

Conference: IFIP TC6 Workshops on Broadband Satellite Communication Systems and Challenges of Mobility, World Computer Congress (WCM)

Publicación: ISBN: 0-387-23993-6 Place: Toulouse, France Date: August 22-27

Authors: David Larrabeiti, Ricardo Romeral, Manuel Urueña, Arturo Azcorra, **Pablo Serrano**

Title: Charging for Web Content Pre-fetching in 3G Networks

Participation: Paper

Conference: Fifth International Workshop on Quality of Future Internet Services, QofIS 2004

Publicación: ISBN: 3-540-23238-9

Place: Barcelona

Authors: Antonio Cuevas, **Pablo Serrano**, Carlos J. Bernardos, Jose I. Moreno, Juergen Jaehnert, Hyung-Woo Kim, Jie Zhou, Diogo Gomes, Pedro Gonçalves, Rui L. Aguiar

Title: Field Evaluation of a 4G "True-IP" network

Participation: Paper

Conference: 13th IST Mobile and Wireless Communications. Summit 2004.

Place: Lion (France) Date: 27-30 June 2004.

Authors: **Pablo Serrano**, C. J. Bernardos, I. Soto, J. I. Moreno

Title: Medida y Análisis del Tráfico Multimedia en Redes Móviles de Cuarta Generación

Participation: Paper

Conference: Jornadas Telecom I+D 2003.

Publicación: ISBN: 84-89315-28-0

Place: Madrid Date: 18-20 Nov 2003

PhD thesis directed

Title: Analysis, characterization, and optimization of the energy efficiency of softwarized mobile platforms

Student: Carlos Donato Morales

University: Universidad Carlos III de Madrid

Faculty: Escuela Politécnica Superior

Date: November 2019

Title: Efficient Voice and Video Traffic Delivery in IEEE 802.11 WLANs: Design, Implementation and Experimental Evaluation

Student: José Pablo Salvador García

University: Universidad Carlos III de Madrid

Faculty: Escuela Politécnica Superior

Date: April 2016

Title: Analysis and optimal configuration of distributed opportunistic scheduling techniques in wireless networks (co-supervised with Prof. Dr. Albert Banchs).

Student: Andrés García Saavedra

University: Universidad Carlos III de Madrid

Faculty: Escuela Politécnica Superior

Date: November 13, 2013

Participation in committees and international representations

Title: Technical Program Committee of the IEEE Conference on Computer Communications (IEEE INFOCOM).

Entity:

Subject: Computer Communications

Date: Editions: 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020

Title: IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)

Entity:

Subject: Wireless Networking

Date: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020

Title: Technical Program Committee of IFIP/FCS NETWORKING

Entity:

Subject: Networking

Date: 2012

Title: Technical Program Committee of International Workshop on Multiple Access Communications (MACOM)

Entity:

Subject: Wireless Networking

Date: Editions: 2010, 2011, 2012

Title: Technical Program Committee of IEEE Globecom Wireless Networking Symposium

Entity:

Subject: Wireless Networking

Date: Editions: 2009, 2010, 2011, 2012, 2013

Title: Technical Program Committee of IEEE Globecom 2008 Communications Quality of Service, Reliability, and Performance Modeling Symposium

Entity:

Subject: Performance Modeling

Date: 2008

Title: Technical Program Committee of the International Conference on Wireless Information Networks and Systems (WINSYS)

Entity:

Subject: : Wireless Networking

Date: Editions: 2008, 2009

Title: Technical Program Committee of the International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities (TRIDENTCOM)

Entity:

Subject: Wireless Information

Date: Editions: 2010, 2011, 2012

R&D management experience
R&D program management, R&D scheduling and actions

Title:

Type of activity:
Date:

Other merits

1. Distinguished Member of the 2020 INFOCOM Technical Program Committee (2020-01-30)
2. Premio de Excelencia 2019 del Consejo Social de la UC3M en la modalidad Joven personal investigador doctor (mayo 2019).
3. Outstanding Thesis Award in Telematic Engineering (2015/16) goes to Pablo Salvador, supervisor (2016-12-13)
4. Premio Best Paper Award en ACM WinTECH 2016
5. IEEE Senior Member (2015-09-29)
6. Outstanding Thesis Award in Telematic Engineering (2013/14) to Andrés García-Saavedra, co-supervisor (2014-11-28)
7. Outstanding Thesis Award in Telematic Engineering (2007/08) (2009-01-20)
8. Premio AT4Wireless en el Congreso Jitel 2007